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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/763,345

01/23/2004

Andrew L. Van Brocklin

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EXAMINER

NGUYEN, DAO H

ART UNIT

PAPER NUMBER

2818

MAIL DATE

DELIVERY MODE

07/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/763,345		VAN BROCKLIN ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Dao H. Nguyen		2818	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 May 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 and 29-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-16 is/are allowed.
- 6) ☒ Claim(s) 29-36 is/are rejected.
- 7) ☒ Claim(s) 1-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. In response to the communications dated 05/14/2007, claims 1-16 and 29-36 are active in this application.

Claim(s) 17-28 have been cancelled.

Claims 29-36 are newly added claims.

### Claim Objection

2. The claim is objected to for the following reason:

In claim 1, lines 11-12, the phrase “a second value of said variable **gap** distance which is smaller than said biased relative **position**” is not clear. A “gap” should not be compared to a “position.” To the best understanding of Examiner, it is assumed that the second value of said variable gap distance is (claimed to be) smaller than the (first) variable gap distance corresponding to said biased relative position.

Similarly, in claim 29, lines 10-11, the phrase “said desired **gap value** less than said relative **position**” is vague. It is assumed that said desired gap value is (claimed to be) less than said gap corresponding to said relative position.

Appropriate correction(s) is/are required.

### Remarks

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3. Applicant's argument(s), filed 05/14/2007, have been fully considered, but are not persuasive. Particularly, arguments relating to claims 1-16 are persuasive, but that/those relating to claims 29-30 is/are not. Claim 29 does not recite that the second voltage difference corresponding to the desired gap value also forces the first and second plates toward each other. Arguments relating to limitation(s) not included in the claim would not be considered having any patentable weight.

### **Claim Rejections - 35 USC § 102**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claim(s) 29-36 are rejected under 35 U. S. C. § 102 (b) as being anticipated by U.S. Patent No. 6,140,737 to Boie.**

Regarding claim 29, Boie discloses a method of operating a micro-electromechanical device 10, shown in figs. 1, 2, comprising first and second plates 12 that are capable of relative movement and biased to a relative position with a gap therebetween, said method comprising:

applying a voltage difference (corresponding to the activated position; col. 2, lines 8-31; or a charge differential corresponding to the difference of the first voltage potential and the second voltage potential; col. 4, lines 61-65) to said two plates 12, said voltage creating an attractive force against said bias that narrows said gap between said two plates, wherein said voltage difference is greater than a second voltage difference corresponding to a desired gap value (corresponding to the rest position; col. 2, lines 8-31), said voltage difference higher than said second voltage difference being applied to accelerate relative movement between said two plates to said desired gap value; and,

after applying said voltage difference (activated voltage), reducing said voltage difference between said two plates to said second voltage difference (voltage at rest position) corresponding to said desired gap value (at rest position) less than said gap corresponding to said relative position (at activated position).

Regarding claim 30, Boie disclose the method further comprising reducing said voltage difference between said two plates 12 to said second voltage difference before movement between said two plates reaches said desired gap value. See col. 2, lines 8-31, col. 4, lines 61-65.

Regarding claim 31, Boie discloses the method wherein said second plate is fixed and said first plate moves relative to said second plate. See col. 2, lines 8-12.

Regarding claim 32, Boie discloses the method further comprising:  
charging a node 20 electrically disconnected from said two plates 12 prior to  
applying said voltage difference; and  
electrically connecting said node 12 with at least one of said plates to apply said  
voltage difference. See col. 3, line 15 to col. 4, line 36.

Regarding claim 33, Boie discloses the method further comprising electrically  
isolating said two plates after applying said voltage difference by opening a switch  
between said node and at least one of said plates. See col. 3, line 15 to col. 4, line 36.  
Note that it is easy to turn the voltage source 20 on/off.

Regarding claims 34-36, Boie discloses the method comprising all claimed  
limitations. See cols. 2-4.

### **Allowable Subject Matter**

6. **Claims 1-7 are objected**, but would be allowable if rewritten to overcome all of  
the objections set forth above.

### **Allowance**

7. **Claims 8-16 are allowed.**

### Conclusion

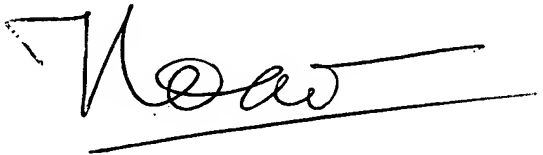
8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dao Nguyen whose telephone number is (571)272-1791. The examiner can normally be reached on Monday-Friday 9:00am - 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Loke, can be reached on (571)272-1657. The fax numbers for all communication(s) is (571)273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1625.

A handwritten signature in black ink, appearing to read 'Dao H. Nguyen', with a horizontal line drawn underneath.

Dao H. Nguyen  
Art Unit 2818  
July 22, 2007

STEVEN LOKE  
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Steven Loke'.